

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Application Review**

**Issue Date:**

**Region:** Mooresville Regional Office  
**County:** Stanly  
**NC Facility ID:** 8400016  
**Inspector's Name:** Carlotta Adams  
**Date of Last Inspection:** 08/15/2017  
**Compliance Code:** W / Violation - procedures

<b>Facility Data</b>  <b>Applicant (Facility's Name):</b> Auria Albemarle, LLC  <b>Facility Address:</b> Auria Albemarle, LLC 313 Bethany Road Albemarle, NC 28001  <b>SIC:</b> 2273 / Carpets And Rugs <b>NAICS:</b> 31411 / Carpet and Rug Mills  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V				<b>Permit Applicability (this application only)</b>  <b>SIP:</b> 02D .0503, 02D .0515, 02D .0516, 02D .0521, 02D .0530, 02D .0614, 02D .1111, 02D .1806, 02Q .0317, 02Q .0512, 02Q .0711 <b>NSPS:</b> No <b>NESHAP:</b> GACT CCCCCC, GACT JJJJJ <b>PSD:</b> Yes <b>PSD Avoidance:</b> No <b>NC Toxics:</b> Yes <b>112(r):</b> No <b>Other:</b> TV Permit Renewal			
<b>Contact Data</b>				<b>Application Data</b>			
<b>Facility Contact</b>  Hans Peebles Technical Manager (704) 983-8394 PO Box 580 Albemarle, NC 28002	<b>Authorized Contact</b>  Daron Hyatt Plant Manager (704) 983-8314 PO Box 580 Albemarle, NC 28002	<b>Technical Contact</b>  Hans Peebles Technical Manager (704) 983-8394 PO Box 580 Albemarle, NC 28002	<b>Application Number:</b> 8400016.17A <b>Date Received:</b> 09/29/2017 <b>Application Type:</b> Renewal/Modification <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 05825/T11 <b>Existing Permit Issue Date:</b> 07/08/2013 <b>Existing Permit Expiration Date:</b> 06/30/2018				
<b>Total Actual emissions in TONS/YEAR:</b>							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	165.70	84.05	108.20	39.19	3.10	3.85	1.80 [Hydrogen chloride (hydrochlori]
2015	168.24	85.91	123.37	40.29	2.89	4.35	2.08 [Hydrogen chloride (hydrochlori]
2014	167.47	85.35	126.08	39.81	3.08	5.13	2.71 [Hydrogen chloride (hydrochlori]
2013	179.20	86.61	116.66	40.53	2.99	4.90	2.44 [Hydrogen chloride (hydrochlori]
2012	187.89	95.47	109.40	44.58	3.33	5.17	2.44 [Hydrogen chloride (hydrochlori]
<b>Review Engineer:</b> Betty Gatano  <b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____					<b>Comments / Recommendations:</b> <b>Issue</b> 05825/T12 <b>Permit Issue Date:</b> _____ <b>Permit Expiration Date:</b> _____		

## **1. Purpose of Application**

IAC Albemarle, LLC currently holds Title V Permit No. 05825T11 with an expiration date of June 30, 2018 for an automotive carpet manufacturing facility in Albemarle, Stanly County, North Carolina. This permit application is for a permit renewal with a request for an ownership change. The renewal application was received on October 2, 2017 (postmarked September 29, 2017), or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

As noted above, the permit application includes a request for an ownership change. The new name for the facility will be Auria Albemarle, LLC (Auria) upon permit issuance. The facility will be referred to as Auria throughout the remainder of this permit review for consistency.

## **2. Facility Description**

Auria manufactures, dyes, and finishes automobile carpeting. The facility operates three boilers, two continuous dye ranges, a coating range, a pilot range, and a range located in the research and development area. (Note the ranges are also referred to as drying units throughout the permit and permit review). The facility operates three shifts per day, five to six days per week, and employs approximately 360. No solvent-based dyes are presently used in the facility.

## **3. History/Background/Application Chronology**

July 8, 2017	TV permit renewed. Air Permit No. 05825T11 was issued on July 8, 2013 with an expiration date of June 30, 2018.
October 2, 2017	Received application for a TV permit renewal and an ownership change. The application was postmarked September 29, 2017. No permit fee was included for the ownership change.
October 12, 2017	Denise Hayes of the Mooresville Regional Office (MRO) provided comments on the permit application.
October 23, 2017	A permit fee in the amount of \$60 for an ownership change was received.
November 9, 2017	Betty Gatano e-mailed Hans Peebles, technical contact for the facility, questions regarding the E5 form and the small gasoline tank (ID No. I-7).
November 13, 2017	Mr. Peebles replied via e-mail and confirmed the facility only consumes approximately 500 gallons of gasoline per year, making it applicable to the work practice standards under GACT Subpart CCCCCC. The e-mail also contained a scanned copy of Form E5 correcting the compliance status of the facility.
November 20, 2017	The revised, signed hardcopy of Form E5 was received.
November 28, 2017	Draft permit and permit review forwarded for comments.

December 1, 2017      Comments received from Mark Cuilla, Permitting Supervisor.

December 11, 2017    Comments from Ms. Hayes received.

December 22, 2017    Comments from Mr. Peoples received.

January 4, 2018        Second version of the permit and review forwarded internally for comments.

January 4, 2018        Samir Parekh provided comments on a minor correction in the CAM section.

January 8, 2018        Ms. Hayes indicated she had no additional comments.

January 10, 2018      Mr. Cuilla had some minor additional comments.

January 10, 2018      Second version forwarded to Mr. Peoples.

February 5, 2018      Additional comments received from Mr. Peoples. His main comments related to an apparent discrepancy in the testing dates for the coal fired boiler. Betty Gatano explained via e-mail that the testing dates were different because separate testing was required under PSD and GACT.

February 6, 2018      Draft permit and permit review forwarded to public notice.

#### 4. Permit Modifications/Changes and TVEE Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Old Numbering		New Numbering		Description of Changes
Page	Section	Page	Section	
Cover and throughout		--	-	Updated all dates and permit revision numbers.
--	Insignificant Activities	--	Insignificant Activities	<ul style="list-style-type: none"> <li>Added GACT Subpart CCCCCC label on gasoline storage tank (ID No. I-7).</li> <li>Updated footnote.</li> </ul>
3	1.0 – Equipment List	3	1.0 – Equipment List	<ul style="list-style-type: none"> <li>Removed natural gas/propane-fired drying unit (ID No. ES-RR4) (Continuous Dye Range #3)</li> <li>Removed natural gas/propane-fired drying unit (ID No. ES-CDR3) (Refinishing Range #4)</li> </ul>
5 – 7	2.1 A.4	5 – 7	2.1 A.4	Updated GACT Subpart JJJJJ condition for boilers (ID Nos. ES-B1 and ES-B2) with most current permitting language.
8 – 9	2.1 B.1.d – i	8	2.1 B.1.d	<ul style="list-style-type: none"> <li>Removed the MRR requirements under 15A NCAC 02D .0503 for boiler (ID No. ES-B3).</li> <li>Specified the MRR requirements under Sections 2.1 B.4.g, h, o, and p for BACT are sufficient for 15A NCAC 02D .0503.</li> </ul>

Old Numbering		New Numbering		Description of Changes
Page	Section	Page	Section	
9 – 10	2.1 B.2.d – g	8	2.1 B.2.d	<ul style="list-style-type: none"> <li>Removed the MRR requirements under 15A NCAC 02D .0516 for boiler (ID No. ES-B3).</li> <li>Specified the MRR requirements under Sections 2.1 B.4.f and p for BACT are sufficient for 15A NCAC 02D .0516.</li> </ul>
10	2.1 B.3.d	9	2.1 B.3.d	Updated monitoring condition under 15A NCAC 02D .0521 to reflect the most current permit language.
10	2.1 B.3.e	--	--	Removed statement “See Section 2.1 B.4 for additional monitoring and recordkeeping requirements for PSD/BACT” and renumbered permit accordingly.
11	2.1 B.4.b.i	10	2.1 B.4.b.i	Removed label “State-Enforceable Only.” Rule 15A NCAC 02D .0535(g) is now federally enforceable.
11	2.1 B.4.d and e	10	2.1 B.4.d and e	Updated testing date to reference specific dates the next testing is due. The most recent performance test was completed on December 5 – 7, 2017, and the next required performance test must be completed within five years or by December 7, 2022, unless an alternative date is approved by the DAQ.
11 – 12	2.1 B.4.f	10	2.1 B.4.f	Added reference to sulfuric acid to permit condition for monitoring sulfur content of coal under BACT.
--	--	11	2.1 B.4.h	Added recordkeeping requirements for monitoring the bagfilter under BACT.
12	2.1 B.4.j	11	2.1 B.4.k	Removed statements “(see requirements of Section 2.1 B.4.n above)” and “(see requirements of Section 2.1 B.4.m above).”
13	2.1 B.4.l	--	--	<ul style="list-style-type: none"> <li>Removed BACT condition for sulfuric acid because it was identical to Section 2.1 B.4.f. The two permit conditions were combined to avoid redundancy.</li> <li>Renumbered permit accordingly.</li> </ul>
14	2.1 B.4.o and q	12	2.1 B.4.p	Clarified and consolidated reporting requirements into one permit condition
14	2.1 B.5.b.ii(3)	12	2.1 B.5.b.ii(3)	Removed reference to opacity under 15A NCAC 02D .0521 and 15A NCAC 02D .0530. Opacity is not an applicable pollutant/regulation for CAM purposes.
14 – 15	2.1 B.5.c	12 – 13	2.1 B.5.c	Updated the CAM plan language to correspond to updated information submitted in the permit application.
15	2.1 B.5.d	13	2.1 B.5.d	Updated reporting requirements under CAM to reflect most current permit language.

Old Numbering		New Numbering		Description of Changes
Page	Section	Page	Section	
15 – 20	2.1 B.6	13 – 18	2.1 B.6	<ul style="list-style-type: none"> <li>Updated format of GACT Subpart JJJJJ condition to make it consistent with most current permit condition.</li> <li>Removed reference to initial compliance dates under GACT Subpart JJJJJ for boiler (ID No. ES-B3) because they have been met.</li> <li>Updated permit condition to specify the one-time energy assessment under GACT Subpart JJJJJ for boiler (ID No. ES-B3) was conducted.</li> <li>Specified date next performance test is due.</li> <li>Removed reference to opacity requirements as Permittee has elected to use bag leak detection system to comply with operating limits.</li> <li>Updated notification requirements.</li> <li>Specified that source testing results must be submitted to EPA's CEDRI.</li> <li>Added noncompliance statements throughout permit condition.</li> </ul>
21 – 22	Throughout Section 2.1 C	19 – 20	Throughout Section 2.1 C	<ul style="list-style-type: none"> <li>Removed natural gas/propane-fired drying unit (ID No. ES-RR4) (Continuous Dye Range #3)</li> <li>Removed natural gas/propane-fired drying unit (ID No. ES-CDR3) (Refinishing Range #4)</li> </ul>
23	2.1 D.1.c – f	20	2.1 D.1.c	<ul style="list-style-type: none"> <li>Removed the MRR requirements under 15A NCAC 02D .0515 for the silos (ID Nos. ES-CS1 and ES-AS1).</li> <li>Specified the MRR requirements under Sections 2.1 D.3.c through f for BACT are sufficient for 15A NCAC 02D .0515.</li> </ul>
24	2.1 D.2.c	21	2.1 D.2.c	Updated monitoring condition under 15A NCAC 02D .0521 to reflect the most current permit language.
25	2.1 D.3.d	22	2.1 D.3.d	Clarified the recordkeeping requirements under BACT for the silos (ID Nos. ES-CS1 and ES-AS1).
26	2.2 A Regulation table	23	2.2 A Regulation table	<ul style="list-style-type: none"> <li>Removed reference to 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016.</li> <li>Removed reference to Permit Shield for ID No. ES-B3. This condition is now contained under Section 2.3</li> </ul>
26 – 27	2.2 A.1	--	--	<ul style="list-style-type: none"> <li>Removed permit condition for 15A NCAC 02D .0958. The rule is no longer applicable state-wide, effective November 1, 2016.</li> <li>Renumbered the permit accordingly.</li> </ul>
30 – 39	Section 3	26 – 35	Section 3	Updated the General Conditions to the most recent revision (V5.1: 08/03/2017).
40	Attachment	36	Attachment	Updated the list of acronyms.

The following changes will be made to the Title V Equipment Editor (TVEE) as part of this permit renewal:

- Remove one natural gas/propane-fired drying unit (12.0 million Btu per hour maximum heat input capacities) (ID No. ES-CDR3).
- Removed one natural gas/propane-fired drying unit (5.8 million Btu per hour maximum heat input capacity) (ID No. ES-RR4).
- Added GACT Subpart CCCCCC label to the gasoline tank (ID No. I-7).

## 5. Ownership Change

The permit application included a request for an ownership change. The permit application included a completed AA4 Form and a letter with the seller's signature indicating the ownership change. As indicated in the cover letter and on the AA4 Form, the transfer of ownership became effective on September 15, 2017. The parties involved with the ownership change are listed below:

- New Owner/Facility Name: Auria Albemarle, LLC
- Former Owner/Facility Name: IAC Albemarle, LLC

An application \$60 fee is required for an ownership change, but no fee was included in the permit application received on October 2, 2017. The \$60 fee was subsequently received on October 23, 2017.

## 6. Regulatory Review

Auria is subject to the following regulations. The permit will be updated to reflect the most current permitting language for all applicable regulations.

- 15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers –The natural gas/No. 2 fuel-oil boilers (ID Nos. ES-B1 and ES-B2) and the coal/No. 2 fuel oil-fired spreader stoker boiler (ID No. ES-B3) are subject to this rule. The particulate matter (PM) emission limit is based on the maximum heat input at the facility, which is shown in the following table.

Emission Source ID	Description	Heat Input (million Btu/hour)	Comments
ES-B1	Natural gas/No. 2 fuel oil-fired boilers	77	--
ES-B2	Natural gas/No. 2 fuel oil-fired boilers	77	--
ES-B3	One coal/No. 2 fuel oil-fired spreader stoker boiler	117	The boiler was constructed in 1986 as a 117 million Btu per hour boiler and was derated in 1994 to a 99.5 million Btu per hour boiler. <sup>1</sup>
Boiler # 4	--	50	The 50 million Btu per hour boiler has been removed from the facility. <sup>1</sup>
<b>Maximum heat input for facility</b>		<b>321</b>	Value used to calculate PM allowable emissions.

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<sup>1</sup> Benoy Peters (10/15/1998).

The PM emission limit for the boilers is calculated by the equation  $E = 1.090 \text{ times } Q \text{ to the } -0.2594 \text{ power}$ , where E is the allowable emission limit for PM in lb/million Btu and Q is maximum heat input in million Btu/hour. Using the maximum heat input of 321 million Btu per hour, the PM limit for these boilers is 0.24 pounds per million Btu.

Although boiler #4 has been removed from the facility and boiler ES-B3 has been derated, removing a fuel burning indirect heat exchanger does not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established, per 02D .0503(e). Therefore, the PM emission limit under 02D .0503 for boilers ES-B1, ES-B2, and ES-B3 remains at 0.24 pounds per million Btu.

The emission factors in the DAQ's spreadsheets for these fuels are presented as follows:

- No. 2 fuel oil – 0.024 pounds per million Btu based on an emission factor for PM of 3.3 pounds per  $10^3$  gallons and a fuel heating value of 140,000 Btu/gallon.<sup>2</sup>
- Natural gas – 0.007 pounds per million Btu as provided in the spreadsheet.<sup>3</sup>
- Coal – 2.58 pounds per million Btu based on an emission factor for PM of 67.1 pounds per ton for a spreader stoker using bituminous coal and a fuel heating value of 13,000 Btu/ton for coal.<sup>4</sup>

Based on these emission factors, no monitoring, recordkeeping, or reporting (MRR) is required for boilers ES-B1 and ES-B2 to ensure compliance for this rule.

Likewise, when No. 2 fuel oil is fired in boiler ES-B3, no MRR is required to ensure compliance with this rule. However, the facility must conduct monthly external visible inspections and annual internal inspections of the bagfilter (ID No. CD-BH1) when firing coal in the boiler to ensure compliance with this rule. No changes to the MRR are required under this permit renewal.

- 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes – The emission sources noted below are subject to 02D .0515. Allowable emissions of PM are calculated from the following equation, for process weight rates up to 30 tons/hr:

$$E = 4.10(P)^{0.67}$$

Where      E = allowable emission rate in pounds per hour  
              P = process weight in tons per hour

- Drying units (ID Nos. ES-CDR1, ES-CDR2, ES-CR1, ES-D6, and ES-RD) – No MRR is required for the drying units to ensure compliance with this rule.
- Silos (ID Nos. ES-CS1 and ES-AS1) with associated bagfilters (ID Nos. CD-CB 1 and CD-AB1, respectively) – The facility must conduct monthly external visible inspections and annual internal inspections of the bagfilters (ID Nos. CD-CB1 and CD-AB1) on the silos. The facility also must replace the bags annually or more frequently if needed to ensure compliance with 02D .0515. Associated recordkeeping and reporting is required. Because these requirements were essentially the same as the MRR requirements under the Best

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<sup>2</sup> “Fuel Oil Combustion Emission Calculator Revision G” (11/15/2012)

<sup>3</sup> “Natural Gas Combustion Emission Calculator Revision N” (01/05/2017).

<sup>4</sup> “Coal Combustion Emission Calculator Revision H” (02/07/2012).

Available Control Technology (BACT) for the silos, the permit condition was modified to reference the BACT condition. Continued compliance with the rule is anticipated.

- 15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources – The emission sources noted below are subject to 02D .0516.
  - Natural gas/No. 2 fuel-oil boilers (ID Nos. ES-B1 and ES-B2) – No MRR is required when firing No. 2 fuel oil or natural gas in these emission sources. These fuels are inherently low enough in sulfur to always be in compliance with this rule.
  - Coal/No. 2 fuel oil-fired spreader stoker boiler (ID No. ES-B3) – No MRR is required when firing No. 2 fuel oil in this emission source. This fuel is inherently low enough in sulfur to always be in compliance with this rule. Auria must provide certification that the sulfur content of coal does not exceed 1.0 percent by weight when burning coal in boiler ES-B3. The facility must also conduct associated recordkeeping and reporting. Continued compliance with this rule is anticipated.
  - Drying units (ID Nos. ES-CDR1, ES-CDR2, ES-CR1, ES-D6, and ES-RD) – No MRR is required when firing propane or natural gas in these emission sources. These fuels are inherently low enough in sulfur to always be in compliance with this rule.
- 15A NCAC 02D .0521, Control of Visible Emissions – The natural gas/No. 2 fuel-oil boilers (ID Nos. ES-B1 and ES-B2) were manufactured and operating as of July 1, 1971 and must not have visible emissions of more than 40 percent opacity when averaged over a six-minute period, except as specified in 15A NCAC 02D .0521(c). No MRR is required for boilers ES-B1 and ES-B2 to ensure compliance for this rule.

The following equipment was manufactured after July 1, 1971 and must not have visible emissions of more than 20 percent opacity when averaged over a six-minute period, except as specified in 15A NCAC 02D .0521(d):

- Coal/No. 2 fuel oil-fired spreader stoker boiler (ID No. ES-B3) – The facility must conduct daily visible emission observations from this boiler to ensure compliance.
- Drying units (ID Nos. ES-CDR1, ES-CDR2, and ES-CDR3, ES-CR1, ES-D6, ES-RR4 and ES-RD). No MRR is required for the drying units to ensure compliance for this rule.
- Silos (ID Nos. ES-CS1 and ES-AS1) – The facility must conduct monthly visible emission observations from the silos to ensure compliance.

The permit condition will be updated under this permit renewal to reflect the most current permitting language.

- 15A NCAC 02D .0530, Prevention of Significant Deterioration (PSD) – The coal/No. 2 fuel oil-fired spreader stoker boiler (ID No. ES-B3), the coal silo (ID No. ES-CS1), and the coal ash silo (ID No. ES-AS1) are subject to BACT permit limitations. More discussion on PSD and BACT is contained in Section 7.
- 15A NCAC 02D .0614, Compliance Assurance Monitoring (CAM) – The bagfilter (ID No. CD-BH1) on the coal/No. 2 fuel oil-fired spreader stoker boiler (ID No. ES-B3) is subject to CAM. More discussion on CAM is contained in Section 7.
- 15A NCAC 02D .1111, Maximum Achievable Control Technology (MACT) – The following emission sources are subject to Generally Available Control Technology (GACT) standards:



- Boilers (ID Nos. ES-B1, ES-B2, and ES-B3) – The boilers are subject to the “NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters for Area Sources,” 40 CFR 63 Subpart JJJJJ.
  - Gasoline storage tank (ID No. I-7) – The small gasoline storage tanks is subject to the “NESHAP for Gasoline Dispensing Facilities (GDF),” 40 CFR 63 Subpart CCCCC.
- More discussion on the GACTs is contained in Section 7.
- 15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions – This condition is applicable facility wide.
  - 15A NCAC 02Q .0711, Emission Rates Requiring a Permit –The facility is subject for acetaldehyde, 1,4-dioxane, and formaldehyde. See Section 8 for further discussion regarding air toxics.
  - 15A NCAC 02Q .0317, Avoidance Conditions – Auria has accepted an avoidance limit for 15A NCAC 02D .1111, Maximum Achievable Control Technology and “NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,” 40 CFR 63 Subpart DDDDD. More discussion on MACT avoidance is found in Section 7.

On November 1, 2016, amendments to 15A NCAC 02D .0902 for VOC emissions were finalized to narrow applicability of work practice standards in 15A NCAC 02D .0958 from statewide to the maintenance area for the 1997 8-hour ozone standard. This change is being made primarily because the abundance of biogenic VOC emissions in North Carolina results in ozone formation being limited by the amount of available NOx emissions. Provisions of the Clean Air Act require VOC requirements previously implemented in an ozone nonattainment area prior to redesignation remain in place. However, facilities outside the maintenance area counties for the 1997 8-hour ozone standard would no longer be required to comply with the work practice standards in 15A NCAC 02D .0958. Stanly County has never been in nonattainment for ozone, and 15A NCAC 02D .0958 is no longer applicable to facilities, including Auria, within the county. The permit condition for 15A NCAC 02D .0958 will be removed from the permit under this modification.

## **7. NSPS, NESHAPS/MACT, NSR/PSD, 112(r), CAM**

### NSPS

The facility is not currently subject to any New Source Performance Standards (NSPS). This permit renewal does not affect this status.

The NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Db, applies to “each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than ...100 million Btu per hour.” The coal-fired boiler (ID No.ES-B3) was constructed in 1986 with a heat capacity of 117 million Btu per hour and was originally subject to NSPS Subpart Db. According to the permit review for Air Permit No. 05825R05,<sup>1</sup> the boiler was derated to 99.5 million Btu per hour under the air permit application received on April 20, 1992. The boiler is no longer subject to NSPS Subpart Db after being derated. Further, NSPS Subpart Dc does not apply to the boiler because the boiler was constructed before June 9, 1989. A “Permit Shield for Non-Applicability Requirements” was added under Air Permit No. 05825T08, specifying that boiler ES-B3 is not applicable to NSPS Subpart Dc. This renewal does not affect the applicability status.

## NESHAPS/MACT

The facility has an accepted an avoidance condition for HAPs. The permit limits emissions of any single HAP to less than 10 tpy and to less than 25 tpy for any combination of HAPs. These limitations were added under Air Permit No. 05825T08 and established Auria as a Title III minor facility. As a minor source of HAPs, Auria avoids the applicability of the NESHAP for Printing, Coating, and Dyeing of Fabrics and Other Textiles, 40 CFR 63 Subpart OOOO and the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD.

### *GACT Subpart 6J*

Because Auria is an area or minor source of HAPs, the boilers (ID Nos. ES-B1, ES-B2, and ES-B3) are subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters for Area Sources, 40 CFR 63 Subpart JJJJJ, or GACT Subpart 6J. All three boilers were constructed prior to June 4, 2010 and are considered to be existing boilers under this rule. The initial notification for the boilers was received on September 7, 2011. An overview of the subcategories for the boilers and their respective requirements under GACT Subpart 6J is contained below.

### Boilers ES-B1 and ES-B2

Previously, Auria indicated that boilers ES-B1 and ES-B2 are used as back up boilers for boiler ES-B3 and operate only about two weeks per year when boiler ES-B3 is out of commission. Based on this description, these boilers fall into the seasonal boiler subcategory, which is defined as the following:

*Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.*

Seasonal boilers are subject to work practice and management practices, including an initial tune-up and one-time energy assessment. The initial tune up and one-time energy assessment were completed in June of 2012. Subsequent boiler tune-ups are required every five years, and Auria conducted the most recent tune-up on these boilers in June 2017. The permit condition for boilers ES-B1 and ES-B2 was updated under this permit renewal to reflect the most current permitting language. The revised permit condition is provided in Attachment 1 to this review.

### Boiler ES-B3

Boiler ES-B3 falls under the coal subcategory under GACT Subpart 6J. The facility must conduct a one-time energy assessment, which was conducted on June 12, 2012, and must also meet emission limits for carbon monoxide and mercury. The facility must be in compliance with the emission limits by March 21, 2014 and must demonstrate compliance no later than 180 days after the compliance date or by September 17, 2014. The facility conducted stack testing on February 18 through 20, 2014 and demonstrated compliance with GACT Subpart 6J as shown in the table below.

Pollutant	Test Results	Emission Limit	Emission Standard	Compliance
CO	38.9 ppmvd @ 3% O <sub>2</sub>	420 ppmvd @ 3% O <sub>2</sub>	MACT 63 Subpart JJJJJ	Yes
Hg	1.77 E-06 lb/MMBtu <sup>5</sup>	2.2E-05 lb/MMBtu	MACT 63 Subpart JJJJJ	Yes
<u>Notes:</u> Test results reviewed and approved by David Hughes of the Stationary Source Compliance Branch (SSCB) in a memorandum dated August 5, 2014.				

The facility is also required to conduct periodic testing no later than 37 months after the most recent performance test. In this case, periodic testing was due in March 2017 but was not conducted. A Notice of Violation was issued on September 20, 2017 for the required performance test. The test was conducted in December 2017, but as of the date of this permit review, the test results have not yet been reviewed.

The permit condition for boiler ES-B3 was updated under this permit renewal, and the revised permit condition is provided in Attachment 2 to this review.

#### *GACT Subpart 6C*

The permit for Auria includes a 500 gallon above ground gasoline storage tank (ID No. I-7), which is on the insignificant activities list. Because the facility is an area source of HAPs, this tank is subject to the “NESHAP for Gasoline Dispensing Facilities (GDF),” 40 CFR 63 Subpart CCCCCC (GACT Subpart 6C). This regulation applies to GDF located at area sources of HAPs, and requirements are determined based on the throughput of gasoline. Auria uses less than 10,000 gallons of gasoline per month and must comply with requirements under 40 CFR 63.11116, as provided below:

#### *40 CFR 63.11116*

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

The tank will remain on the insignificant activities list because it meets the definition under 15A NCAC 02Q .0503(8). Compliance with GACT Subpart 6C is anticipated.

<sup>5</sup> “Million Btu” is abbreviated “MMBtu” in all tables throughout this review to preserve formatting.

### PSD

The facility is major for PSD. BACT limits for the coal fired boiler (ID No. ES-B3), the coal silo (ID No. ES-CS1), and the coal ash silo (ID No. ES-AS1) were included in Air Permit No. 05825<sup>6</sup> issued on March 14, 1986. The BACT limits are provided in the table below.

Emission Source Description	Pollutant	Limit	Method for Demonstrating Compliance
No. 2 fuel oil/coal-Fired Boiler (ID No. ES-B3)	PM Opacity	0.05 lb/MMBtu 20%	Conduct source testing. Conduct monthly and annual inspections of bagfilter (ID No. CD-BH1). Conduct daily VE observations.
	NO <sub>x</sub>	0.6 lb/MMBtu	Conduct source testing. Monitor O <sub>2</sub> content of the exhaust.
	SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	1.5 lb/MMBtu 0.21 lb/MMBtu	Limit sulfur content of coal to 1%.
	Fluorides	0.0064 lb/MMBtu	No controls or MRR required
Coal Silo (ID No. ES-CS1) Coal Ash Silo (ID No. ES-AS1)	PM	0.001 lb/hr	Conduct monthly and annual inspections of bagfilters (ID Nos. CD-CB1 and CD-AB1).

Air Permit No. 05825T11 required the facility to conduct testing on Boiler ES-B3 by July 8, 2014 (1 year after permit issuance) to demonstrate compliance with the BACT limits for PM, nitrogen dioxide, and visible emissions. Although the permit only required testing of these pollutants, Auria tested for compliance with all BACT emission limits. Testing was conducted on February 18 – 20, 2014, and compliance was demonstrated, as shown in the table below.

Pollutant	Test Results	Emission Limit	Emission Standard	Compliance
Total PM	0.0184 lb/MMBtu	0.05 lb/MMBtu	2D .0530 BACT	Yes
SO <sub>2</sub>	1.09 lb/MMBtu	1.5 lb/MMBtu	2D .0530 BACT	Yes
NO <sub>x</sub>	0.472 lb/MMBtu	0.6 lb/MMBtu	2D .0530 BACT	Yes
H <sub>2</sub> SO <sub>4</sub>	0.000463 lb/MMBtu	0.021 lb/MMBtu	2D .0530 BACT	Yes
VE	0%	20%	2D .0530 BACT	Yes
F	0.00271 lb/MMBtu	0.0064 lb/MMBtu	2D .0530 BACT	Yes
<u>Notes:</u> Test results reviewed and approved by David Hughes of the SSCB in a memorandum dated August 5, 2014.				

Testing for PM, NO<sub>x</sub>, and opacity from boiler ES-B3 for compliance with the BACT will be required under this permit renewal. Compliance with BACT for other pollutants will be demonstrated as noted above. The permit will be updated to reflect changes in permit language. Continued compliance is anticipated.

### 112(r)

The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the rule. This permit renewal does not affect this status.

### CAM

40 CFR Part 64 is applicable to any pollutant-specific emission unit, if the following three conditions are met:

<sup>6</sup> Reference to these BACT limits was provided in the permit review for initial the Title V permit by Charlie Yirka (09/04/2003). No revision number was provided for the permit issued on March 14, 1986.

- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- the unit's precontrol potential emission rate exceeds either 100 tons/yr (for criteria pollutants) or 10/25 tons/yr (for HAPs).

The only add on control devices at Auria are bagfilters to control PM as shown in the following table.

Emission Source ID No.	Emission Source Description	Control Device.	Pre-Controlled Emissions	Is CAM Applicable?
ES-B3	One coal/No. 2 fuel oil-fired spreader stoker boiler	CD-BH-1 jet pulse bagfilter	726 tpy for total PM <sup>1</sup> 181 tpy for condensable PM <sup>2</sup>	YES
ES-CS1	One coal silo#1	CD-CB1 – Bagfilter	31.4 tpy <sup>3, 4</sup>	NO
ES-AS1	One ash silo #1	CD-AB1 – Bagfilter	23.6 tpy <sup>3, 5</sup>	NO
<b>Notes:</b> 1. PM emissions are based on maximum heat input rate of 99.5 million Btu per hour and a controlled PM emission rate of 0.020 pounds per million Btu as measured during 2010 stack testing. Assuming a bagfilter control efficiency of 98.8%, potential uncontrolled PM emissions are estimated at 726 tpy. 2. Condensable PM emissions were measured as 0.005 pounds per million Btu during 2010 stack testing. Assuming a bagfilter control efficiency of 98.8%, potential uncontrolled condensable PM emissions are estimated at 182 tpy. This value is similar to PM10 emission rate of 221 tpy estimated from DAQ's, "Coal Combustion Calculator Revision G" (02/10/12). 3. Emission data for the silos are taken from the permit review for Air Permit No. 05825T10 dated December 19, 2008. 4. According to the permit review noted above, the initial Title V permit application indicated a maximum process rate for the coal silo at 31,350 tons per year. Auria estimated 2 pounds of PM are emitted per ton of coal. With this factor and the maximum process rate, PM emissions are estimated at 31.4 tons per year. 5. According to the permit review noted above, the initial Title V permit application indicated a maximum process rate for the ash silo at 1,570 tons per year. Auria estimated 30 pounds of PM (10 pounds during ash transfer and 20 pounds during silo loading) are emitted per ton of ash. With this factor and the maximum process rate, PM emissions are estimated at 23.6 tons per year.				

As shown in the table above, CAM is applicable to the bagfilter (ID No. CD-BH-1) on the coal fired boiler (ID No. ES-B3). A CAM condition for this unit was added under Air Permit No. 05825T10. The condition was updated in this permit renewal to reflect changes noted in the permit application. Continued compliance is anticipated.

## 8. Facility Wide Air Toxics

The Permittee has made a demonstration per 15A NCAC 02Q .0711 that facility-wide actual emissions of acetaldehyde, 1,4-dioxane, and formaldehyde do not exceed the Toxic Permit Emission Rates (TPERs). A permit to emit any of these pollutants shall be required if actual emissions from all sources will become greater than the corresponding TPERs. This permit renewal does not affect this status, and continued compliance is expected.

## **9. Facility Emissions Review**

There is no change in Title V potential emissions for this renewal. Actual emissions for 2012 – 2016 are provided in the header to this document.

## **10. Compliance Status**

During the most recent inspection, conducted on August 15, 2017 by Carlotta Adams of the MRO, the inspector observed that the facility had missed a required stack test. The facility was otherwise in compliance. The DAQ issued a Notice of Violation on September 20, 2017 for the missed stack test. The test was conducted in December 2017, but as of the date of this permit review, the test results have not yet been reviewed.

Additionally, a signed Title V Compliance Certification (Form E5) indicating the facility was in compliance with all applicable requirements was submitted on November 20, 2017.

## **11. Public Notice/EPA and Affected State(s) Review**

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. South Carolina and Mecklenburg County Air Quality are affected areas within 50 miles of this facility and will be notified accordingly

## **12. Other Regulatory Considerations**

- A P.E. seal is NOT required for this application.
- A zoning consistency determination is NOT required for this application.
- A permit fee of \$60 was required for the ownership change but was not included in the permit application. The fee was subsequently received on October 23, 2017.

## **13. Recommendations**

The permit renewal application for Auria Albemarle, LLC in Albemarle, Stanly County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 05825T12.

## Attachment 1

### GACT Subpart 6J Permit Condition for Boilers (ID Nos. ES-B1 and ES-B2)

#### 4. 15A NCAC 02D .1111: - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

**Applicability** [§63.11193, §63.11194(a)(1), (b), §63.11200(d)]

- a. For this seasonal boilers (**ID Nos. ES-B1 and ES-B2**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, “Maximum Achievable Control Technology” as promulgated in 40 CFR Part 63, Subpart JJJJJ, “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers,” including Subpart A “General Provisions.”

**Definitions and Nomenclature**

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply. Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown.

**General Provisions** [§63.11235]

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR Part 63, Subpart JJJJJ.

**Compliance Dates** [§63.11196(c), §63.11210(e)]

- d. The Permittee shall achieve compliance with the initial tune up and one-time energy assessment requirements no later than March 21, 2014. The initial tune-up on the boilers (**ID Nos. ES-B1 and ES-B2**), and one-time energy assessment were conducted in June 2012. [§63.11196(a), §63.11210(c)]

**General Compliance Requirements** [15A NCAC 02Q .0508(b), §63.11205(a)]

- e. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

**Performance Tune-up Requirements** [15A NCAC 02Q .0508(b)]

- f. The Permittee is required to conduct an initial performance tune-up and subsequent tune-ups every five years.
  - i. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up.
  - ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
  - iii. The tune-ups shall be conducted according to the following procedures:

- (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. (The Permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection).
- (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (The Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection).
- (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (F) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

[§63.11201(b), Table 2, §63.11223(b), (d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these tune-up requirements are not met.

**Recordkeeping** [15A NCAC 02Q .0508(f)]

g. The Permittee shall:

- i. as required in 40 CFR 63.10(b)(2)(xiv), keep a copy of each notification and report that was submitted to comply with this rule and all documentation supporting any Notification of Compliance Status that was submitted.
- ii. maintain on-site and submit, if requested by the Administrator, a report containing the following information:
  - (A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
  - (B) A description of any corrective actions taken as a part of the tune-up of the boiler.
  - (C) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- iii. keep the following records to document conformance with the applicable requirements:
  - (A) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
  - (B) Records of the days of operation per year for each seasonal boiler.
  - (C) Records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
  - (D) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 2.1 A.4.e, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[§63.11225(c), §63.11223(b)(6)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.



- h. The records must be in a form suitable and readily available for expeditious review. The Permittee shall keep each record for 5 years following the date of each recorded action. The Permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met. [§63.11225(d)]

**Reporting** [15A NCAC 2Q .0508(f)]

- i. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.4.g and h postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

## Attachment 2

### GACT Subpart 6J Permit Condition for Boiler (ID No. ES-B3)

#### 6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

**Applicability** [40 CFR 63.11193, 40 CFR 63.11194(a)(1), (b), 40 CFR 63.11200(d)]

- a. For the coal-fired boiler (**ID No. ES-B3**), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111, Maximum Achievable Control Technology” as promulgated in 40 CFR Part 63, Subpart JJJJJ, “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers,” including Subpart A “General Provisions.”

**Definitions and Nomenclature** [40 CFR 63.11237]

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

**General Provisions** [40 CFR 63.11235]

- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR Part 63, Subpart JJJJJ.

**Compliance Dates** [40 CFR 63.11196(a), 40 CFR 63.11210(e)]

- d. The Permittee shall achieve compliance with one-time energy assessment requirements no later than March 21, 2014. The one-time energy assessment was conducted in June 2012.
- e. The Permittee shall achieve compliance with emission limits for mercury and carbon monoxide (CO) no later than March 21, 2014, as specified in 40 CFR 63.11196(a)(2).

**General Compliance Requirements** [15A NCAC 02Q .0508(b), 40 CFR 63.11205(a)]

- f. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

**Emission Limits** [40 CFR 63.11201(a) and Table 1]

- g. The Permittee shall comply with the following emission standards for boiler (**ID No. ES-B3**) [Table 1 of 40 CFR Part 63, Subpart JJJJJ]:
  - i. Mercury: 2.2E-05 lb per million Btu of heat input
  - ii. Carbon monoxide (CO): 420 ppm by volume on a dry basis corrected to 3 percent oxygen
  - iii. These emission limits shall apply at all times the boiler is in operation except during periods of startup and shutdown as defined under 40 CFR 63.11237. The Permittee shall follow procedures under Section 2.1 B.6.y during periods of startup and shutdown. [40 CFR 63.11201(d) and Table 2]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

**Periodic Testing** [15A NCAC 02Q .0508(f)]

- h. The Permittee shall conduct all applicable performance (stack) tests according to 40 CFR 63.11212 on a triennial basis. Each triennial performance test must be completed no more than 37 months after the previous performance test. The most recent performance test was completed on December 5 – 7, 2017, and the next required performance test must be completed no later than **January 7, 2021**.
- i. During each performance stack test, the Permittee shall establish operating limits according to 40 CFR 63.11211(b)(1) through (4), 40 CFR 63.11222, and Table 6 of Subpart JJJJJJ.
- j. If the Permittee demonstrates compliance with the mercury emission limit based on fuel analysis, the Permittee shall conduct a fuel analysis according to 40 CFR 63.11213 for each type of fuel burned as specified in paragraphs (i) and (ii) below:
  - i. If the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, the Permittee does not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements.
  - ii. If the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, the Permittee shall conduct quarterly sampling.
- k. If the Permittee burns a new type of fuel or fuel mixture, the Permittee shall conduct a fuel analysis before burning the new type of fuel or mixture in the boiler. The Permittee shall recalculate the mercury emission rate using Equation 1 of 40 CFR 63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.
- l. For existing affected boilers that have not operated since the previous compliance demonstration and more than 3 years have passed since the previous compliance demonstration, the Permittee shall complete subsequent compliance demonstration no later than 180 days after the re-start of the affected boiler.
- m. If the results of the periodic performance tests are above the limits given in Section 2.1 B.6.g above or if the requirements in Sections 2.1 B.6.h through l are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

**Operating Limits** [40 CFR 63.11201 and Table 3 of Subpart JJJJJJ]

- n. The Permittee uses a fabric filter for compliance and has elected to comply with the operational limits using a bag leak detection system. The Permittee shall install and operate a bag leak detection system according to 40 CFR 63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
- o. The Permittee shall only burn fuel for which compliance with the emission limit Section 2.1 B.6.g above has been demonstrated through stack testing and/or fuel analysis.
- p. The Permittee shall maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test.
- q. The Permittee shall maintain the 30-day rolling average O<sub>2</sub> content at or above the minimum O<sub>2</sub> level established during the most recent CO performance test.
- r. If the requirements in Sections 2.1 B.6.n through q are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

**Monitoring** [15A NCAC 02Q .0508(f)]

- s. The Permittee shall install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs 40 CFR 63.11224 (f)(1) through (8). The Permittee shall initiate corrective action within 1 hour of bag of a bag leak detection system alarm and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a six-month period as specified in 40 CFR 63.11222(a)(4). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the fabric filter is not installed,

- calibrated, maintained, or continuously operated as specified in this paragraph or if the leak detection alarm sounds more than 5 percent of the operating time during a six-month period.
- t. The Permittee shall maintain monthly fuel records of fuel use according to 40 CFR 63.11222(a)(2) and 40 CFR 63.11225(b)(4). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if a fuel is used, except during startup, after the initial compliance period for which the Permittee has not demonstrated compliance with the emission limits in Section 2.1 B.6.g above.
  - u. The Permittee shall collect operating load data (fuel feed rate or steam generation data) every 15 minutes and reduce the data to 30-day rolling averages. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the boiler operating load exceeds 110 percent of the average operating load recorded during the most recent stack test.
  - v. The Permittee shall install, operate, and maintain a continuous oxygen monitor according to the procedures in 40 CFR 63.11224(a)(1) through (6). The Permittee shall continuously monitor the O<sub>2</sub> content of flue gas at the outlet of the boiler according to 40 CFR 63.11224 and reduce the data to 30-day rolling averages. This requirement does not apply to units that install an O<sub>2</sub> trim system since these units will set the trim system to the level specified in 40 CFR 63.11224(a)(7). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the 30-day rolling average O<sub>2</sub> content is not maintain at or above the minimum O<sub>2</sub> level established during the most recent CO performance test.
  - w. The Permittee shall develop a site-specific monitoring plan according to the requirements in 40 CFR 63.11224(c)(1) through (4) of Subpart JJJJJJ. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the site-specific monitoring plan is not developed.
  - x. If the Permittee has an operating limit that requires the use of a continuous monitoring system (CMS), the Permittee shall install, operate, and maintain each continuous parameter monitoring system according to the procedures in 40 CFR 63.11224(d)(1) through (5). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if CMS is not installed, operated, or maintained as specified in this paragraph.
  - y. The Permittee shall minimize the boiler's time spent during startup and shutdown following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the Permittee shall follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. [40 CFR 63.11214(d) and 40 CFR 63.11223(g)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

**Recordkeeping Requirements** [40 CFR 63.11225(c)(1) through (7)]

- z. The Permittee shall maintain the following records as specified in 40 CFR 63.11225(c)(1) through (7):
  - i. A copy of each notification and report that was submitted to comply with Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted.
  - ii. Records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 40 CFR 63.11223 as specified in paragraphs (A) through (D) below:
    - A. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) of this chapter, the Permittee must keep a record that documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the Permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4) of this chapter, the Permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c) of

- this chapter, the Permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the Permittee must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).
- B. For each boiler required to conduct an energy assessment, the Permittee must keep a copy of the energy assessment report.
  - C. For each boiler subject to an emission limit in Table 1 to Subpart JJJJJJ, the Permittee must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used.
- iii. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. The Permittee can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type.
  - iv. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.
  - v. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
  - vi. The Permittee must keep the records of all inspection and monitoring data required by 40 CFR 63.11221 and 63.11222, and the information identified in paragraphs (A) through (F) below for each required inspection or monitoring.
    - A. The date, place, and time of the monitoring event.
    - B. Person conducting the monitoring.
    - C. Technique or method used.
    - D. Operating conditions during the activity.
    - E. Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
    - F. Maintenance or corrective action taken (if applicable).
  - vii. The Permittee must keep the records specified in paragraphs (A) through (C) below for the bag leak detection system:
    - A. Records of the bag leak detection system output.
    - B. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.
    - C. The date and time of all bag leak detection system alarms, and for each valid alarm, the time the Permittee initiated corrective action, the corrective action taken, and the date on which corrective action was completed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

**Reporting Requirements** [40 CFR 63.11225]

- z. The Permitted shall submit the following notifications as specified in 40 CFR 63.11225(a)(1) through (a)(4):
  - i. All of the notifications in 40 CFR 63.7(b), 63.8(e) and (f), 40 CFR 63.9(b) through (e), and 40 CFR 63.9(g) and (h) that apply to the facility by the dates specified in those sections.
  - ii. Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin.
  - i. Notification of Compliance Status - The Permittee must submit the Notification of Compliance Status within 60 days of completing the performance stack test. The Notification

of Compliance Status must include the information and certification(s) of compliance in paragraphs 40 CFR 63.11225(a)(4)(i) through (v), as applicable, and must be signed by a responsible official. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these notification and reporting requirements are not met.

- aa. Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by this subpart, the Permittee shall submit the results of the performance tests, including any associated fuel analyses, as follows:
  - i. For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site ([https://www3.epa.gov/ttn/chief/ert/ert\\_info.html](https://www3.epa.gov/ttn/chief/ert/ert_info.html)) at the time of the test, the Permittee must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If the Permittee claims that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. or
  - ii. For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, the Permittee must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.
- bb. Annual Compliance Certification Report (40 CFR 63.11225(b)) – The Permittee shall prepare and submit, by March 1 of each year, an annual compliance certification report for the previous calendar year, starting **March 1, 2015**. The report shall contain the following information as specified in paragraphs 40 CFR 63.11225(b)(1) through (4). The report must be submitted by March 15 if the Permittee had any instance described by paragraph (b)(3) of 40 CFR 63.11225.
  - i. Company name and address.
  - ii. Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart.
  - iii. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.
  - iv. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the Permittee or EPA through a petition process to be a non-waste under 40 CFR 241.3(c), whether the fuel(s) were processed

from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and the total fuel usage amount with units of measure.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these notification and reporting requirements are not met.

- cc. The Permittee shall report each instance in which the Permittee did not meet each applicable emission limit and operating limit in Tables 1 and 3 of Subpart JJJJJJ. These instances are deviations from the emission limits in Subpart JJJJJJ and must be reported according to the requirements in 40 CFR 63.11225 and as specified in Section 2.1 B.6.bb above.
- dd. In accordance with 15A NCAC 02Q .0508(f), the Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.